

STANFORD UNIVERSITY SCHOOL OF MEDICINE

STANFORD MEDICAL CENTER
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DEPARTMENT OF GENETICS

Area Code 415
321-1200

September 2, 1965

Professor Roald Hoffmann
Assoc. Prof. of Chemistry
Department of Chemistry
Cornell University
Ithaca, New York

Dear Professor Hoffmann:

Thank you for your very interesting letter, and for picking up ACCC. This appears in some earlier listings and we must have just dropped a card at some sorting before the tables were lined up. I hope there are not too many bugs -- they are more likely to appear in the gauche sets, (which I may be subconsciously rejecting.)

The non Hamiltonian graphs are coded as splicings of two (or more) circuits. The appropriate edges must be signified. See attached. No attempt has been made to scan the nonplanar, nonpolygonal graphs.

I would be delighted to hear how you came out in your synthesis. Are you thinking of building any gauche forms?

Do you have some use for the complete set of graphs including trees and complexes? If so and you can describe the domain in graph terms, I could easily generate the set and would be glad to.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

JL:eif

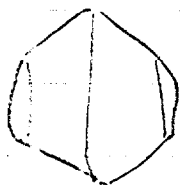
P.S. Did you recognize the truncated tetrahedron as BFBFBB?

ROALD
HOFFMANN

Attachment as is.

Example 8 ACA: 8, 1: A.

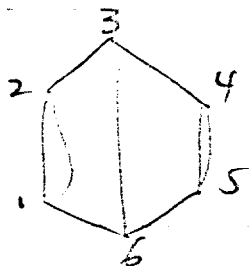
ACA is



A is

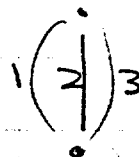
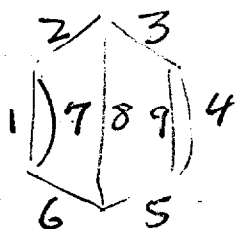


Nodes are numbered:



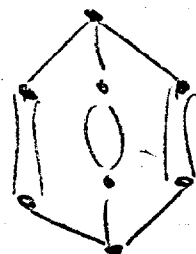
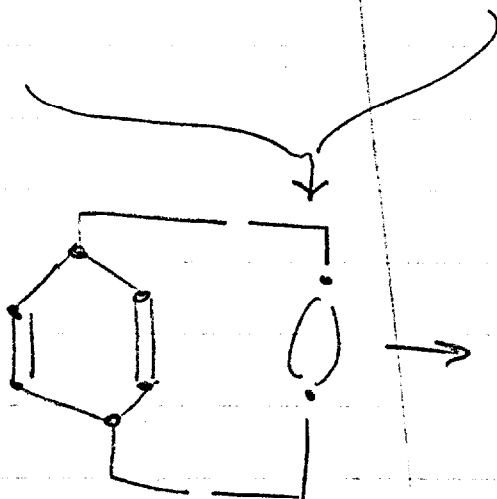
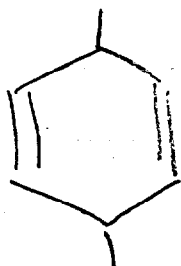
edges are

(polygon first;
then chords)



So the fragment ACA: 8, is

1: A



QED

The full paper
has details of
canons for
numbering (generally
a minimum vector value)